

BORDER REV. DATE: June 1, 2004

I. GENERAL

This project involves the modification of an existing Traffic Control Signal at the intersection of US 1 and Melbourne Place in Prince George's County. A fourth leg on the westside of the intersection is to be added. Video detection shall be installed at the intersection and one video camera shall also be installed at US 1 and Lakeland Road. Countdown pedestrian signals with audible pushbuttons shall be installed. US 1 is assumed to run a north-south direction.

II. INTERSECTION OPERATION

- The intersection shall continue to operate in a NEMA six-phase, semi-actuated mode, with the US 1 approaches running concurrently. An Exclusive left turn phase shall be added along northbound US 1 at Melbourne and shall operate with the existing overlap clearance phase. Countdown pedestrian phases with audible pushbutton actuation shall be provided across the south and west leg of the intersection. The Melbourne Place / Driveway approaches shall also run concurrently.
- The existing size "6" base-mounted cabinet and controller shall be used. Video interface and all associated equipment shall be added.
- SHA Signal Shop shall install APS control unit into controller cabinet. The contractor shall deliver the Control Unit and audible pushbuttons to the SHA Signal Shop for testing and programming.

III. SPECIAL NOTES

- The Contractor shall be responsible for terminating all signal cables, excluding interconnect, to the appropriate terminals and shall properly label each cable.
- All controller cabinet wiring will be performed by the S.H.A. Signal Shop Contact Mr. Ed Rodenhizer at (410) 787-7652 seventy-two hours in advance of intended work.
- All underground and overhead utilities shown on these plans are schematic only and may not be complete. The Contractor shall be responsible for notifying Miss Utility prior to construction so that all utilities may be located in the field. If the Contractor perceives that a conflict between the utilities and the traffic signal will occur, the Contractor shall notify the Project Engineer immediately so that the conflict may be resolved.

IV. APS will function as follows:

FOR US 1 (BALTIMORE AVENUE) SOUTHSIDE

- When pedestrian locates and presses pushbutton for an extended time, the pushbutton unit will announce "Wait to cross Baltimore at Melbourne."
- When WALK phase begins, the message will be a rapid tick which will last for the duration of the WALK phase.

FOR COCHRANE STUDENT HOUSING DRIVEWAY, WESTSIDE

- When pedestrian locates and presses pushbutton for an extended time, the pushbutton unit will announce "Wait to cross Driveway at Baltimore."
- When WALK phase begins, the message will be a rapid tick which will last for the duration of the WALK phase.

The contact persons for District #3 (Prince George's County) are as follows:

Mr. Brian Young
Assistant District Engineer - Traffic
Phone: (301) 513-7318

Mr. Richard L. Daff, Sr.
Chief, Traffic Operations Division
Phone: (410) 787-7630

Mr. Vernon Stinnett Jr.
Assistant District Engineer - Maintenance
Phone: (301) 513-7304

Mr. Ed Rodenhizer
Chief, Signal Operations Section
410-787-7652

Mr. Augie Rebish
Assistant District Engineer - Utility
Phone: (301) 513-7350

Mr. Sonny Bailey
Chief Sign Shop
410-787-7676

EQUIPMENT LIST

A. EQUIPMENT TO BE FURNISHED BY THE SHA

THERE IS NO EQUIPMENT TO BE SUPPLIED BY THE SHA

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

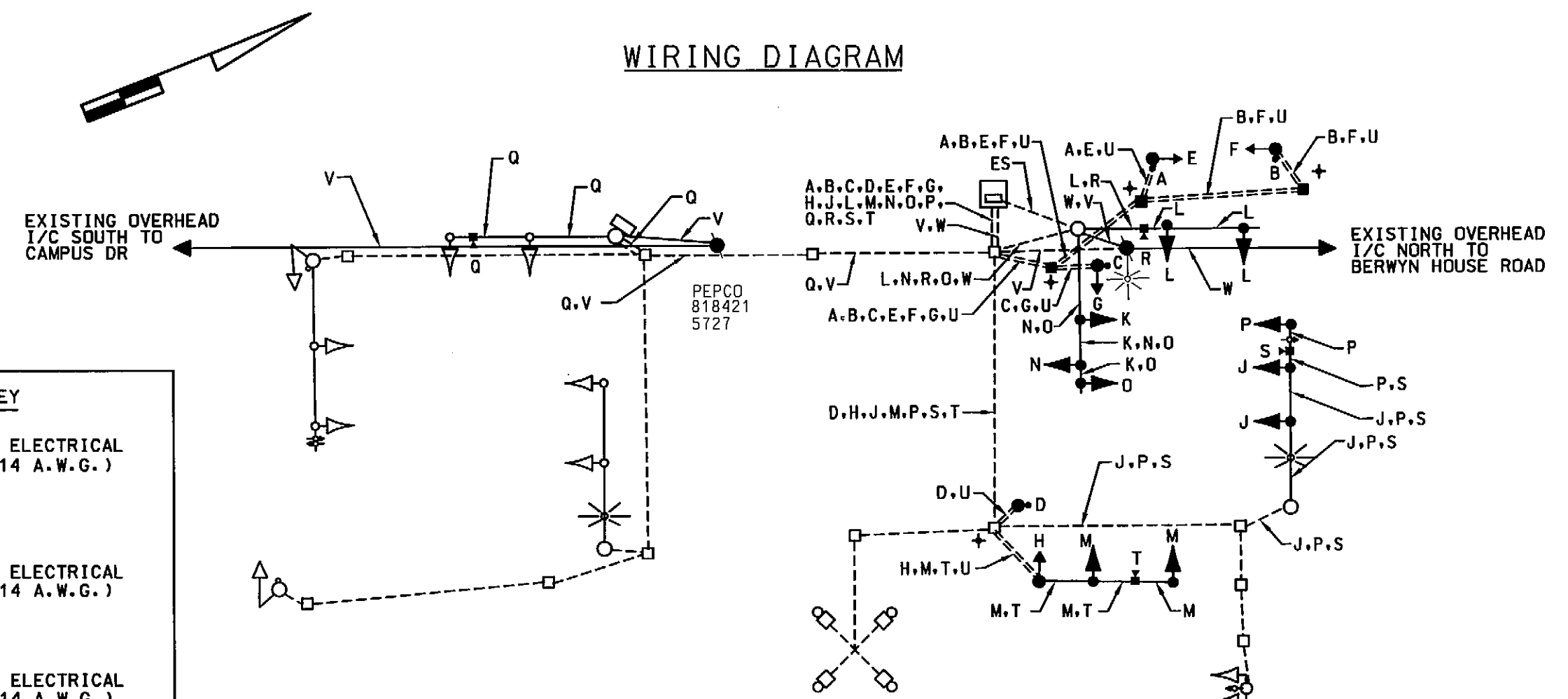
SPEC. NUMBER	DESCRIPTION	QUANTITY
814	12", one-way, three-section (R,Y,G) LED traffic signal head with adjustable bracket for mast arm mounting and tunnel visors.	6 EA
814	12", one-way, three-section (RA,YA,GA) (left arrows) LED traffic signal head with adjustable bracket for mast arm mounting and tunnel visors.	2 EA
814	16", one-way, LED (DW, W) symbolic pedestrian signal head with adjustable bracket for post top mounting and outway visors. (Countdown Display)	3 EA
814	16", one-way, LED (DW, W) symbolic pedestrian signal head, signal pole mounted and outway visors (Countdown Display)	1 EA
205	Test pit excavation.	5 C.Y.
206	Remove existing sidewalk.	200 S.F.
601	5" concrete sidewalk.	200 S.F.
801	Furnish and install concrete for signal foundation.	5 C.Y.
813	Ground mounted sheet aluminum signs to consist of:	4 S.F.
	Pedestrian education R10-3(1) sign. (Note: Sign to read "PUSHBUTTON TO CROSS BALTIMORE AVENUE".)	2 EA
	Pedestrian education R10-3(1) sign. (Note: Sign to read "PUSHBUTTON TO CROSS DRIVEWAY".)	2 EA

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR (CON'T)

SPEC. NUMBER	DESCRIPTION	QUANTITY
556	5" white permanent preformed thermoplastic pavement marking	90 L.F.
556	5" yellow permanent preformed thermoplastic pavement marking	380 L.F.
556	12" white heat applied permanent preformed thermoplastic pavement marking	290 L.F.
556	24" white heat applied permanent preformed thermoplastic pavement marking (Left)	90 L.F.
556	Furnish and install heat applied permanent preformed thermoplastic pavement marking arrow.	1 EA
	Remove existing pavement markings	975 L.F.
805	Furnish and install 3" schedule 80 rigid polyvinyl chloride conduit - trenched	90 L.F.
805	Furnish and install 4" schedule 80 rigid polyvinyl chloride conduit - bored.	100 L.F.
807	Furnish and install 16.5' steel pole with a special 15' " with 50' mast arm (mast arm is to be cut down to 42')	1 EA
811	Furnish and install electrical handhole.	3 EA
810	Furnish and install 2-conductor electrical cable (No. 14 A.W.G.).	380 L.F.
810	Furnish and install 5-conductor electrical cable (No. 14 A.W.G.).	875 L.F.
810	Furnish and install 7-conductor electrical cable (No. 14 A.W.G.).	370 L.F.
810	Furnish and install ground rod - 3/4" x 10'.	4 EA
810	Furnish and install No. 6 AWG stranded bare copper ground wire.	300 L.F.
	Furnish and install 10' breakaway pedestal pole with transformer base.	3 EA
	Furnish and install 5' breakaway pedestal pole with transformer base	1 EA
	Terra interface panel	1 EA
	Terra Access Port	1 EA
	Terra Video camera detector with control cable (up to 500').	4 EA
	Remove and dispose of existing signal equipment and material (including signal foundation 12" below grade).	1 lump sum
	2-wire central control unit	1 EA
	Audible/tactile pedestrian pushbutton station & signs.	4 EA
	Remove existing curb and gutter.	40 L.F.
	Install Type A curb and gutter.	40 L.F.

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)
	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)
	(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)
PHASE 2 & 6	G	G	←R←	←R←	G	G	G	G	G	G	R	R	R	R	R	R	DARK	DARK	DW	DW	DW	DW	WK	WK
2 & 6 CHANGE	Y	Y	←R←	←R←	G	G	Y	Y	G	G	R	R	R	R	R	R	DARK	DARK	DW	DW	DW	DW	FL/DW	FL/DW
OVERLAP CLEARANCE AND NORTH BOUND LEFT TURN	R	R	←G←	←G←	G	G	R	R	G	G	R	R	R	R	R	R	DARK	DARK	DW	DW	DW	DW	DW	DW
CLEARANCE CHANGE	R	R	←Y←	←Y←	Y	Y	R	R	Y	Y	R	R	R	R	R	R	DARK	DARK	DW	DW	DW	DW	DW	DW
PHASE 4 & 8	R	R	←R←	←R←	R	R	R	R	R	R	G	G	G	G	G	G	DARK	DARK	DW	DW	DW	DW	DW	DW
4 & 8 CHANGE	R	R	←R←	←R←	R	R	R	R	R	R	Y	Y	Y	Y	Y	Y	DARK	DARK	DW	DW	DW	DW	DW	DW
ALT PHASE 8	R	R	←R←	←R←	R	R	R	R	R	R	R	R	G	G	G	G	DARK	DARK	WK	WK	WK	WK	DW	DW
PED CLEARANCE	R	R	←R←	←R←	R	R	R	R	R	R	R	R	G	G	G	G	DARK	DARK	FL/DW	FL/DW	FL/DW	FL/DW	DW	DW
ALT 8 CHANGE	R	R	←R←	←R←	R	R	R	R	R	R	R	R	Y	Y	Y	Y	DARK	DARK	DW	DW	DW	DW	DW	DW
PRE-EMPTION - 1	R	R	←R←	←R←	R	R	R	R	R	R	R	R	G	G	G	G	FL/R	FL/R	DW	DW	DW	DW	DW	DW
PRE-EMPTION - 1 CHANGE	R	R	←R←	←R←	R	R	R	R	R	R	R	Y	Y	Y	Y	Y	DARK	DARK	DW	DW	DW	DW	DW	DW
PRE-EMPTION - 2	G	G	←R←	←R←	G	G	G	G	G	G	R	R	R	R	R	R	DARK	DARK	DW	DW	DW	DW	DW	DW
PRE-EMPTION - 2 CHANGE	Y	Y	←R←	←R←	Y	Y	Y	Y	Y	Y	R	R	R	R	R	R	DARK	DARK	DW	DW	DW	DW	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/RA/FL/RA/FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK	DARK	DARK	DARK	DARK



STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION	
US 1 (BALTIMORE AVE) AND MELBOURNE PLACE / LAKE LAND DRIVE COLLEGE PARK, MARYLAND	
GENERAL INFORMATION SHEET	
SCALE NONE	DATE 6-18-09
CONTRACT NO. BW996M82	
DESIGNED BY R R ZACHERL	COUNTY PRINCE GEORGE'S
DRAWN BY W J NIES	LOGMILE 16000104.48
CHECKED BY	TMS NO. J676
F.A.P. NO.	TOD NO.
TS NO. 3218E	DRAWING NO. 2 OF 2
SHEET NO. OF	

PLOTTED: #DATE TIME#
FILE: #FILES#